Opening Statement
Congressman Brian Bilbray (R-CA)
House Committee on Science and Technology
Full Committee Hearing

Opportunities and Challenges for Nuclear Power

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Chairman Gordon and Ranking Member Hall, thank you very much for holding this timely and important hearing on the opportunities and challenges for nuclear power. As our nation grapples with an increasing energy demand and the need to combat global warming, nuclear power must be an option to address these issues.

Mr. Chairman, yesterday nearly a billion people around the world celebrated Earth Day. All across the television, the internet, radio and other means of communications we were told of the countless opportunities that alternative energy sources would have to combating global climate change. There were stories on solar, wind, hydroelectric and even vegetable oil. But nothing on nuclear power's promises. Why?

Last month, the Energy Information Agency (EIA) released its outlook for 2008. EIA indicated that U.S. electricity demand would grow 30 percent between 2006 and 2030. Likewise CO2 emissions are predicted to increase 16 percent from 2006 levels at a time when it will be essential to decrease them.

While the pain here at home is bad, the worldwide problems associated with increased population growth and energy consumption in developing nations will be catastrophic. EIA notes that "total electricity demand in the non-OECD nations is expected to grow from 2004 to 2030 at an annual rate that is nearly triple the rate of growth for electricity demand in the OECD." This increased energy demand will most likely result in increased greenhouse gas emissions and widespread global warming damage.

If we are to combat this looming crisis we will need a mixed bag of solutions. These will need to include command and control techniques including the use of renewable fuels such as wind and solar power, sequestration of fossil fuels, and most importantly the use of nuclear technology.

Nuclear energy has all the properties and benefits our world needs to successfully combat global climate change and meet our energy needs. Nuclear energy is one of the cleanest energy sources known to mankind. Nuclear energy accounts for 73 percent of the nation's clean air generation. In 2005, U.S. nuclear power plants reduced emissions of nitrogen oxides and sulfur dioxide—pollutants controlled under the Clean Air Act—by 1.1 million short tons and 3.3 million short tons respectively. The amount of nitrogen oxide emissions that nuclear plants prevent annually is the equivalent of taking nearly 55 million passenger cars off the road. Even more striking is in that same year, U.S. nuclear power plants prevented the discharge of 682 million metric tons of carbon dioxide into

the atmosphere. This is nearly as much carbon dioxide as is released from all U.S. passenger cars.

A global strategy of climate change control has been backed by numerous world leaders and scientific experts. Yvo de Boer, Executive Secretary of the United Nation's framework Convention on Climate Change noted that he had never seen a credible scenario for reducing greenhouse gas emissions that did not include nuclear power. Likewise, the United Nation's Intergovernmental Panel on Climate Change (IPCC), which won a 2007 Nobel Prize along with Vice President Al Gore, noted in their report the need for nuclear energy. In the IPCC's Fourth Assessment Report, the panel identifies nuclear energy as a key technology in addressing global climate change. The report states that a "robust mix" of energy sources, including nuclear energy, "will almost certainly be required to meet the growing demand for energy services, particularly in developing countries."

The United States has not built a new nuclear power plant in nearly 20 years. If we are to truly harness this great technology and solve our environmental problems, we must make a commitment to nuclear research and development as well as the production of new nuclear facilities.